Storm Data and Unusual Weather Phenomena

January 1999

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

INDIANA, Northeast

INZ003>009-012>018-020-022>027-032>034 — **La Porte - St. Joseph - Elkhart - Lagrange - Steuben - Noble - De Kalb - Starke - Pulaski - Marshall - Fulton - Kosciusko - Whitley - Allen - White - Cass - Miami - Wabash - Huntington - Wells - Adams - Grant - Blackford - Jay**

02	**0000EST**	**0**	**0**			**Heavy Snow**
03	**0000EST**					

Synoptic and mesoscale conditions on the 1st of January 1999...

The northern hemishperic longwave pattern began the year in transition as a high zonal index hinted at major changes to the longwave pattern over the New Year's Day weekend. Two potent shortwaves...one associated with the northern branch of the jet stream and the other associated with the southern branch...were progged to phase over the central plains on the 2nd of January. Lee troughing developed during the day on the 1st with the eventual surface low developing across the Texas panhandle that afternoon. Tremendous moisture was advected off the gulf of mexico during the afternoon as the low deepened. Moderate to heavy snow began to break out across the county warning area by late evening.

On the 2nd of January...intense low pressure was located across northeast Arkansas and slowly moved northeastward into northwest Indiana by late evening. Snowfall rates of 1 to 2 inches per hour were common throughout the day with even heavier snow noted as the system wrapped up and closed off over northern Illinois that evening. Nearly all the snowfall across the county warning area was due to the tremendous warm advection that occurred on the nose of a 60 knot low level jet overtop the shallow cold dome that was in place. Precipitation in areas along and east of a Lafayette Indiana to Defiance Ohio line eventually changed to freezing rain and sleet as 850 millibar temperatures warmed to above freezing. Snowfall amounts were the highest observed since the Blizzard of 1978 in many areas. Several cooperative observer stations reported all-time record 24 hour snowfalls as well. Storm totals ranged from two feet across northwest Indiana and southwest lower Michigan ...12 to 18 inches across north central Indiana into south central Michigan and northwest Ohio... 6 to 8 inches across east central Indiana into western Ohio, where significant sleet and freezing rain later fell on top of the heavy snow.

Impacts on the people across the area were significant. Many rural roads remained impassable for several days. Some schools were closed for up to two weeks after the snowstorm. Many buildings... especially manufacturing warehouses and large retail stores in areas that received the heavier snow... reported collapsed roofs due to the weight of the snow. Damage estimates were not known at the time of this report.

INZ020-025-027-032 — **White - Huntington - Adams - Grant**

22	**2000EST**	**2**	**0**	**2.5K**		**Flood**
31	**1200EST**					

During the evening of the 22nd an automobile containing a mother and her 9 year-old son was swept into Grassy Fork Creek in southwestern Grant County. They were not able to escape from the car and drowned.
On the 22nd ice on the Tippecanoe River took skirting from mobile homes in low-lying areas. On the 23rd a man (age unknown) was missing and presumed dead possibly as a result of flooding in Adams County. On the morning of the 24th, an ice jam which swept up a boat, jet ski, and several trees, formed at a bridge on the Tippecanoe River. Basements were flooded in Warren Indiana as a result of flooding on the Salamonie River. F27VE, M9VE

MICHIGAN, Extreme Southwest

MIZ077>081 — **Berrien - Cass - St. Joseph - Branch - Hillsdale**

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03	**0000EST**					

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OHIO, Northwest

OHZ001>002-004>005-015>016-024>025 **Williams - Fulton - Defiance - Henry - Paulding - Putnam - Van Wert - Allen**

02	**0000EST**	**0**	**0**		**Heavy Snow**
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OHZ004-004-004>005 **Defiance - Henry**

22	**2200EST**	**0**	**0**	**17.5K**	**Flood**
31	**0000EST**				

At a location above the dam on the Auglaize River in Defiance County, the crawl space of a house was flooded. A park was flooded by the Maumee River in the city of Defiance. This resulted in volunteers having to evacuate six families and then opening a Red Cross shelter. A low area on the Tiffin River was flooded near Evansport. On the afternoon of the 23rd, flooding occurred on the first floor of six homes on Catherine Drive in Liberty Center (Washington Township). Damage was mainly to carpets, walls, and furniture.